CLAIMS

A process for rendering graphics in a computer environment, comprising
the steps of:

binning frame geometries into screen tiles;

determining the visible fragments of said geometries for each of said screen tiles by traversing said geometries multiple times;

rasterizing parameter values for said visible fragments;

shading said visible fragments; and

resolving colors for each pixel.

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- 2. The process of Claim 1, wherein said binning step includes screen space tiling.
- 3. The process of Claim 1, wherein said binning step uses single+ buffering for page memory management.
- 4. The process of Claim 1, wherein said determining step generates depth information.
 - 5. The process of Claim 1, wherein said determining step scan converts primitives.
- 25 6. The process of Claim 1, wherein said determining step outputs visible fragments and visible geometries.
 - 7. The process of Claim 6, wherein said determining step stores visibility information on a first pass and outputs visibility information on a last pass.